1 Introduction

The objective of the Central California Ozone Study (CCOS) is to provide an improved understanding of relationships among emissions, transport, and ozone standard exceedances, as well as to facilitate planning for further emission reductions needed to attain State and Federal ozone standards. CCOS is an integrated effort that includes air quality and meteorological field measurements, emissions characterization, data analysis, and air quality modeling. The modeling domain for CCOS covers all of central California and most of northern California, extending from the Pacific Ocean to east of the Sierra Nevada and from Redding to the Mojave Desert. The selection of this study area reflects the regional nature of the State 1-hr and Federal 8-hr ozone exceedances, increasing urbanization of traditionally rural areas, and a need to include all of the major flow features that affect air quality in central California in the modeling domain. CCOS details can be found at www.arb.ca.gov/airways/ccos/ccos.htm.

NOAA's Air Resources Laboratory (ARL) Field Research Division (FRD) was tasked by the California Air Resources Board (CARB) to deploy nine meteorological towers and a ground-based remote sensing system for CCOS. These instruments were deployed over a four-month period from June 1, 2000 to September 30, 2000. Each tower was equipped with a cup anemometer and vane to measure wind speed and direction, respectively, at 10 m above ground level. In addition, air temperature and relative humidity were acquired at 2 m. The ground-based remote sensor system included a phased-array Doppler sodar and a 924-MHz radar wind profiler. A data summary is presented in this report.